REMARKS

In the Office Action, the Examiner rejected claims 1-3, 5-17, 20-22, 24, 25, 27-36, 39-41, and 43-51. By this paper, Applicants amended independent claims 1, 15, 25, 36, and 46, cancelled claims 5 and 17, and added new claim 52 (directed to a loop reactor) for clarification of certain features to expedite allowance of the present application. These amendments do not add any new matter. Upon entry of these amendments, claims 1-3, 6-16, 20-22, 24, 25, 27-36, 39-41, and 43-52 will be pending in the present application and are believed to be in condition for allowance. In view of the foregoing amendments and the following remarks, Applicants respectfully request reconsideration and allowance of all pending claims.

Rejections Under 35 U.S.C. § 102(b)

The Examiner rejected claims 36, 43, 46, and 49 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,816,379 issued to Rosenbaum et al. (hereafter "Rosenbaum"). Applicants respectfully traverse this rejection.

Legal Precedent

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). Every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). Indeed, the prior art reference also must show the *identical* invention "*in as complete detail as contained in the ... claim*" to support a *prima facie* case of anticipation.

Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

Deficiencies of the Rejection

Turning to the claims, independent claim 36, as amended, recites a "loop polymerization reactor." In contrast, Rosenbaum discloses a reaction vessel 25. Rosenbaum is absolutely devoid of a loop polymerization reactor. This is not surprising considering the age of the reference, for example. For this reason alone, the cited reference cannot anticipate claim 36 or its dependent claims.

Further, claim 36, as amended, recites "a recycle tank adapted to receive hydrocarbon liquid from the condenser and to receive hydrocarbon fluid from the hydrocarbon/purge gas recovery unit." Conversely, the Rosenbaum storage vessel 73, which the Examiner labels as a recycle tank, only receives one input (liquid from condenser 72). Clearly, the storage tank 73 does not receive hydrocarbon fluid from a hydrocarbon/purge gas recovery unit, as claimed. Indeed, the entire Rosenbaum reference is devoid of this feature. Therefore, Rosenbaum cannot anticipate claim 36 or its dependent claims for this additional reason.

Claim 46, as amended, recites "transporting an equilibrium vapor of the recovered hydrocarbon liquid *without compression* to a fractionation system." (Emphasis added). Quite the opposite, Rosenbaum discloses that vapor (in line 25) from storage vessel 73 is compressed (via compressor 76) prior to introduction to fractionating column 78. Indeed, applicants believe such compression is necessary in the Rosenbaum system so to provide for reentry of the fluid (via reflux tank 81 and line 84) to the reactor 25. Thus, Rosenbaum cannot anticipate claim 46 or its dependent claims. For these reasons, the Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 102.

Claim Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 1, 2, 5-7, 9-14, 25, 27, and 29-35 under 35 U.S.C. § 103(a) as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379) in view of Sherk et al. (U.S. Patent No. 4,501,885); claims 8 and 28 as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379) in view of Sherk et al. (U.S. Patent No. 4,501,885) and further in view of Findlay (U.S. Patent No. 3,035,040) claims 15-17, 20, 22, 24, and 45 as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379) in view of Hanson (U.S. Patent No. 5,597,892) and Sung (U.S. Patent No. 5,314,579); claim 21 under as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379) in view of Hanson (U.S. Patent No. 5,597,892) and Sung (U.S. Patent No. 5,314,579) and in further view of Findlay (U.S. Patent No. 3,035,040); claims 39 and 41 under as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379); claim 40 under as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379) in view of Findlay (U.S.

Patent No. 3,035,040); claim 48 under as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379) in view of Findlay (U.S. Patent No. 3,035,040); and claims 50 and 51 under as being unpatentable over Rosenbaum et al. (U.S. Patent No. 3,816,379) in view of Sherk et al. (U.S. Patent No. 4,501,885).

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). To establish a *prima facie* case, the Examiner must show that a combination of references includes *all* of the claimed elements, *and* also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *See Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). Moreover, the Supreme Court has stated that the obviousness analysis should be explicit. *See KSR Int'l Co. v. Teleflex, Inc.*, No. 04-1350, page 14 (U.S., decided April 30, 2007). "[R]ejections based on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *See id.* (quoting *In re Kahn,* 441 F.3d 977,988 (Fed. Cir. 2006)). Further, the Examiner cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

Deficiencies of the Rejections

Independent claims 1, as amended, recites, "passing a second portion of the recovered hydrocarbon fluid stream from the recovery zone to the recycle zone." Similarly, independent claim 25 recites "passing a second portion of the recovered hydrocarbon fluid stream from the recovery zone to the recycle zone." Independent claim 15 recites "a recycle tank adapted to receive condensed hydrocarbon vapor from the condenser *and* to receive a second hydrocarbon fluid stream from the hydrocarbon/purge gas recovery unit." (Emphasis added). In stark contrast, all three references cited by the Examiner, whether taken alone or in combination, are absolutely devoid of these recited features feature.

The Examiner relied on Rosenbaum to teach these features. However, Applicants first stress that the Rosenbaum storage vessel 73 receives only one input (via line 71). Second, the Rosenbaum does not transport recovered hydrocarbon fluid from a recovery unit to the storage vessel 73, as claimed. Applicants disagree with the Examiner's contention that the stream (in line 44) is transferred to the storage vessel 73. Nevertheless, the stream in line 44 is a liquid and not a vapor, as claimed. Moreover, the secondary references cited by the Examiner do not obviate these deficiencies of Rosenbaum. In view of the foregoing, independent claims 1, 15, and 25, and their dependent claims, are patentable over the cited references, whether taken alone or in combination. For these reasons, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 103.

Conclusion

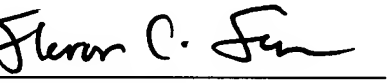
Applicants respectfully submit that all pending claims should be in condition for allowance. However, if the Examiner believes certain amendments are necessary to clarify the present claims or if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Authorization for Extensions of Time and Payment of Fees

In accordance with 37 C.F.R. § 1.136, Applicants hereby provide a general authorization to treat this and any future reply requiring an extension of time as incorporating a request thereof. The Commissioner is authorized to charge the requisite fee for any extensions of time, and any additional fees which may be required to advance prosecution of the present application, to the Deposit Account No. 06-1315; Order No. CPCM:0019 (210331US).

Respectfully submitted,

Date: September 14, 2007



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